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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,976	08/31/2000	Yaqi Chen	TI-28222	3070

7590 08/23/2004
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EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,976

Applicant(s)

CHEN ET AL.

Examiner

Lawrence B Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-31 is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 7-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4, 7-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Steele et al. (US 2002/0136167 A1).

(1) With regard to claim 1, Steele et al. discloses in Fig. 1, a communication network (10), comprising: a network node (16); a first terminal (24) having a first modem connected to

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said network node via a master communication loop (18; [0026]); and a second terminal (20) having a second modem also connected to said network node via said master communication loop [0031], wherein the first and second terminals are adapted to communicate with the network node and each other with signals compatible with ADSL standards ([0032]).

(2) With regard to claim 2, Steele et al. also discloses in Fig. 1, wherein the first terminal (24) and second terminal (20) are locally proximate one another ([0024]).

(3) With regard to claim 3, Steele et al. also discloses wherein the master communication loop comprises a twisted pair of conductors ([0032]). Steele et al. is silent as to the master communication loop comprises a twisted pair of conductors, but does disclose a I1 line, or digital subscriber line. One of ordinary skill in the art would know that lines comprise a twisted pair of conductors.

(4) With regard to claim 4, Steele et al. also discloses wherein the network node is adapted to permit and enable the first terminal to communicate with the second terminal via the network node ([0024]).

(5) With regard to claim 7, Steele et al. also discloses wherein the first terminal and second terminal are adapted to simultaneously communicate over said common master communication loop with said network node ([0050]).

(6) With regard to claim 8, Steele et al. discloses the access lines protocols to be of any variant of xDSL. It is well known in the art that ADSL technology incorporates a frequency division technique ([0032]).

(7) With regard to claim 9, Steele et al. also discloses in Fig. 1, wherein the network node is a central office (CO) located remote from both the first and second terminal ([0030]).

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(8) With regard to claim 10, Steele et al. also discloses in Fig. 1, wherein the first terminal is a personal computer.

(9) With regard to claim 11, claim 11 inherits all limitations of claim 1 above.

(10) With regard to claim 12, claim 12 inherits the limitations of claims 2, 4 and 12.

(11) With regard to claim 13, claim 13 inherits the limitations of claims 3 and 14.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (US 2002/0136167 A1) as applied to claim 4 above, and further in view of Miao et al. (US Patent 6,279,022 B1).

(1) With regard to claim 4, as noted above, Steele et al. discloses all limitations of claim 12. He does not however, disclose wherein the modem establishes first terminal imitating a communication as a master maintaining a superframe. However, Maio et al. teaches imitating a communication as a master maintaining a superframe (col. 1, lines 39-60).

One skilled in the art would have clearly recognized that imitating a communication as a master maintaining a superframe is a well-known technique introduced in many references. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to apply the method as taught by Maio et al. to modify the invention of Steele et al. as a known

method of synchronization between the modems for correct detection of received symbol boundaries.

(2) With regard to claim 6, Maio et al. also discloses wherein the network node directs the first terminal to maintain the superframe (col. 1, lines 39-60).

6. Claims 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steele et al. (US 2002/0136167 A1) as applied to claim 12 above, and further in view of Miao et al. (US Patent 6,279,022 B1).

(1) With regard to claim 14, as noted above, Steele et al. discloses all limitations of claim 12. He does not however, disclose wherein the modem establishes first terminal imitating a communication as a master maintaining a superframe. However, Maio et al. teaches imitating a communication as a master maintaining a superframe (col. 1, lines 39-60).

One skilled in the art would have clearly recognized that imitating a communication as a master maintaining a superframe is a well-known technique introduced in many references. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to apply the method as taught by Maio et al. to modify the invention of Steele et al. as a known method of synchronization between the modems for correct detection of received symbol boundaries.

(2) With regard to claim 15, Steele et al. also discloses wherein the modem is adapted to simultaneously communicate with the first terminal and the second terminal ([0050]).

(3) With regard to claim 16, Steele et al. discloses that the client computer may have a variety of connections to a network, including, a wireless link, a T1 line and a digital subscriber

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line. One of ordinary skill in the art would know that the simultaneous communication technique could inherently be one of either time or frame of code division dependent upon the connection to the network.

(4) With regard to claim 17, claim 17 inherits all limitations of claims 1 and 12 above.

(5) With regard to claim 18, claim 18 inherits all limitations of claims 16 and 17 above

(6) With regard to claim 19, claim 19 inherits all limitations of claims 3 and 17 above.

(7) With regard to claim 20, claim 20 inherits all limitations of claims 15 and 17 above.

(8) With regard to claim 21, claim 20 inherits all limitations of claims 3 and 17 above.

Allowable Subject Matter

7. Claims 21-31 are allowed.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 703-305-6969. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

August 17, 2004



STEPHEN CHIN
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